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between Dermovate and hydrocortisone treated episodes if the placebo effect was 40%, 110 patients were needed. Unfortunately, recruitment was slow and the study ended when the expiry date of the medications was reached.

This report describes the outcomes in the patients who participated. The ethics committee of Mount Vernon and Watford Hospitals NHS Trust approved the study; patients gave written informed consent. All patients had introital pain, tenderness, and erythema compatible with a diagnosis of vulval vestibulitis. The study comprised three phases:

- (1) emollients only for 2-8 weeks,
- (2) tube one of the study medication, applied to the vestibule each night for 28 nights,
- (3) tube two of medication used similarly.

The tubes were identical and the study was designed so that within blocks of 10 patients, half would use each medication first. The same clinician assessed each patient at 14 day intervals using a three point scale for each of the parameters—pain, tenderness, and erythema (maximum score 9; minimum score 0 for each visit). The scores obtained at entry (minimum 3) and after each phase were noted.

Twenty two patients were recruited, but some patients withdrew or were excluded for protocol violations. Fourteen patients completed all phases of the study and two completed the first two phases. After emollient use, nine patients had improved (mean score -1.1; range -0.5 to -2); after Dermovate, 11 improved (mean score -2.7; ranges -0.5 to -8); and after hydrocortisone nine improved (mean score -1.8; range -1 to -3) (table 1). Eight patients who used both treatments had a better response to Dermovate and four had a better response to hydrocortisone (p<0.07). Eight patients expressed a definite preference, seven for Dermovate and one for hydrocortisone. There may, however, have been an effect of the order of the treatments as two patients did better on their first treatment whereas nine did better on their second (p<0.06).

Although this study was not completed, some conclusions can be reached. Short term use of a potent topical steroid preparation did not produce a clinically important improvement in all cases but some patients had very good responses, which were maintained. This may reflect the fact that the aetiology of vulval vestibulitis is multifactorial and where there has been an inflammatory, infective, or irritant cause, topical steroids may be helpful. There is an urgent need to identify and classify the causes of this syndrome so that appropriate treatment can be targeted more accurately.

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Worse

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# Unexpected resistance in an African immigrant: lessons for the unwary

The number of people emigrating from Africa to the United Kingdom has been escalating. They contribute to the increasing number of heterosexuals with HIV in the United Kingdom.¹ Increasingly, developing countries are improving their access to antiretroviral drugs through global funds for AIDS and other sources. It is well known that resistance to antiretrovirals develops where therapy is either suboptimal or adherence is imperfect, and that such resistance is associated with poor outcome.²

A Zimbabwean man aged 47 was admitted to the Royal Sussex County Hospital, in August 2001 with lobar pneumonia. He had excellent response to the appropriate antibiotics. He reported receiving treatment for tuberculosis twice in the past. He had a positive HIV antibody test which was done after pretest discussion. The baseline CD4 count and viral load were consistent with advanced infection, 20 ×10<sup>6</sup>/l (2%) and 134 000, respectively.

He was commenced on combination antiretroviral therapy with combivir and efavirenz, and had a good initial virological response with a drop of his viral load to 1230 (3.09 logs) in 2 weeks. However, his viral load rebounded to 71 000 at 6 weeks. He was thought to be non-adherent to the antiretrovirals at this stage and was questioned extensively regarding adherence. He claimed 100% adherence to his medication and denied any missed or late doses. Interactions with prescribed and non-prescribed medications were excluded.

At this stage a genotypic resistance test was organised from the sample, with a viral load of 71 000 and he was admitted to the local respite unit (The Sussex Beacon) for directly

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Hydrocortisone ointment

observed therapy (DOT). The viral load after 2 weeks of DOT was 240 000.

A genotypic resistance test revealed the following mutations: K65R, D67N, K70R, K103N, M184V, G190A, T215F, K219Q, suggesting that he had extensive resistance to nucleoside analogues and to all nonnucleosides. When he was reviewed with his resistance test result, he still denied any knowledge of HIV testing or treatment in Zimbabwe, but identified combivir tablets as part of his anti-tuberculosis medication. Genotypic resistance testing of his archived initial sample before his commencement of treatment showed: M41L, V118I, M184V, T215F.

He was then commenced on a salvage regimen of didanosine, tenofovir, kaletra, and sauquinavir HG and had a good virological response with a viral load drop of 1350 (3.13 logs) in 4 weeks.

It remains uncertain whether in this case the individual had been aware of his HIV status. It is possible that antiretroviral medications may have been included as part of an unorthodox anti-tuberculosis regimen, given the high co-infection rate in Zimbabwe, without the individual having been informed. Alternatively, the individual may have been unwilling to disclose his status for fear of rejection of his legal claim to stay in the United Kingdom or for other sociocultural reasons.

Either way, the choice of initial therapy was inappropriate, given the underlying resistance to reverse transcriptase analogues, and resulted in the subsequent rapid accumulation of NNRTI resistance.

While it is known that acquired resistance mutations may disappear with time after discontinuation of therapy<sup>3</sup> had a genotype resistance test been performed at presentation in this case a more effective regimen would have been selected. Current BHIVA guidelines recommend resistance testing before therapy only in the context of demonstrable transmitted drug resistance.

As antiretroviral therapies become increasingly available in developing countries and while stigma regarding disclosure of HIV status for immigrants remains, we believe that similar cases will occur.

We strongly suggest that immigrants with a new HIV diagnosis should be closely questioned regarding previous testing and treatment, and also baseline resistance testing should be routinely considered.

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| Table I   | Treatment outcomes |                  |
|-----------|--------------------|------------------|
|           | Emollient          | Dermovate ointme |
| Improved  | 9                  | 11               |
| Unchanged | 5                  | 2                |